hour earlier during the month of October on account of darkness, there being no way of lighting the building artificially.

The exhibit was visited by many thousands of people, among whom were meteorologists and those interested in related sciences from all parts of the civilized world. The cloud photographs, the method of making weather forecasts, and the kite and aerial apparatus attracted special attention.

Many interested in aeronautics and air explorations examined the kite exhibit in detail, taking photographs and measurements of the kite, instruments, and apparatus. Notably among these were a number of officers of the German, French, Italian, and Japanese armies and navies.

During the meeting of the International Meteorological Congress, which brought to Paris representative meteorologists from nearly all parts of the world, a special invitation was extended to its delegates and members to visit and inspect the Weather Bureau exhibit. This invitation was accepted, and, therefore, the exhibit brought the methods, instruments, etc., of the United States Weather Bureau to the attention of those most interested in meteorological work.

It was the special effort of those connected with the exhibit to explain and set forth in the strongest and clearest light possible the aims and methods of the United States Weather Bureau, and its practicability and great economic value to the people of the United States and of North America. Special stress was given to the great importance and the value of its weather forecasts and warnings.

It is to be regretted that on account of the expense and lack of funds for the necessary cablegrams the daily weather map of the United States, as originally planned, could not have been printed and issued daily[1] in connection with the exhibit. It is also to be regretted that a concise pamphlet or catalogue of the exhibit could not be prepared and printed for distribution, as there was a great demand for something of this kind.

As a result of the visit of the Jury of Awards and their critical examination of our exhibit the United States Weather Bureau was awarded a *Grand Prix*. Gold medals were awarded to two officials of the Weather Bureau, viz: Prof. C. F. Marvin for instruments, apparatus, and appliances, and to Prof. A. J. Henry for cloud photographs.

THE PROCEEDINGS OF THE PERMANENT INTERNATIONAL METEOROLOGICAL COMMITTEE.

From Professor Hildebrandsson, the new Secretary of the Permanent International Meteorological Committee, we have received the printed proceedings of the session of September 15. The committee elected Messrs. Pallazzo of the Central Office at Rome and Shaw of the Meteorological Office in London as new members to replace Messrs. Tacchini and Scott. Professor Hildebrandsson was elected Secretary of the committee. Professor Rucker was elected President of the Magnetic Committee. The directors of magnetic observatories are invited to send regularly to the secretary a list of the days that they consider to have been magnetically calm; these lists will be distributed. The cloud committee expresses the wish that the directors of meteorological observatories shall make simultaneous observations of the clouds at periods to be fixed in advance by the committee on aeronautics.

The committee on aeronautics expresses the opinion that it is desirable that military establishments for ballooning and meteorological institutions in general, be invited by their respective governments to participate in these international ascensions; this request will be communicated by the French Government to all other nations through diplomatic channels.

The subcommittee on telegraphy recommends the following: By reason of the advantages already obtained by extending the radial (i. e., circuit) system into neighboring countries, the subcommittee has decided to propose to the International Meteorological Committee to take the proper steps to form, as soon as possible, a committee composed of official representatives of the participating states, and instructed to confer with the international telegraphic bureau at Berne in order to find the most appropriate means of improving the service of meteorological dispatches.

[1] This will, however, be done at the Pan-American Exposition to be held at Buffalo in 1901, when a complete exhibit of the magnitude and importance of the work of the Weather Bureau will be made.—ED.

OSCILLATIONS OF LAKE LEVEL.

Referring to Professor Henry's article in the MONTHLY WEATHER REVIEW for May, Prof. F. A. Forel, of Morges, writes to him as follows:

I am very much pleased with your excellent study on the frequent lowerings of the level of Lake Erie, caused by the winds. On our Lake Leman, where the local conditions are less favorable, I have not observed a similar change of more than 12 centimeters. (See Leman, Vol. II, p. 29.) You found, the 25th of May, 1900, a change of level of 25 centimeters. This is superb.

However, what interests me still more are your seiches, viz, the balancing oscillations in the water of the lake as a whole. You give very fine examples of uninodal oscillations, with opposing balancings at the two extremities of the lake on the 27th, 28th, and 29th of March; duration of the period about fifteen hours.

On the other hand, on the 26th and 27th you observed a binodal oscillation with parallel movements at the two extremities of the lake, consequently with a node in the middle of the lake; duration of the period about ten hours.

I am very much puzzled by this strange relation of ten to fifteen hours in the duration of the ninodal and binodal periods; according to theory the relation should be as 1 to 2. But in practice we obtain slightly different relations, sometimes larger and sometimes smaller: Lake Leman, 2.07; Lake Constance (Boden See), 1.98; Lake Zurich, less than 2 00; Lake George, 1.82; Lake Lucerne (four Cantons), 1.83, etc. (See Leman, II, p. 162.) But so large a difference as that of Lake Erie (1.5) we have never yet observed.

I am also very much astonished to see the rapidity with which the binodal oscillation disappeared on the evening of March 27. There was again a slight trace on the Buffalo curve at 10 p. m. of the 27th, then all vanished and gave place to a simple uninodal oscillation. In our lakes, Leman in particular, the series of seiches continue much longer.

I have just tried to apply the computations of P. du Boys (Leman II, p. 83) to your Lake Erie, basing my calculations on the hydrographic chart which you sent me. I obtained for the uninodal seiche 16.9, which is a little more than the rises of the 28th of March give us, but the difference does not exceed the limits of error of this method.

Your observations are very interesting; they give us the *longest oscillations that have ever been accurately measured up to the present time on any body of water*, 400 kilometers, following the curves of the principal axis of the lake. I shall rejoice to see the continuation of your observations on this subject. If you could have made for me some tracings of the finest series of your uninodal and binodal seiches they would be of great interest to me as well as to those of my colleagues among the Swiss naturalists who are studying the phenomena with me.

I should very much like to be able to send you the memoirs published by myself on this phenomenon, but unfortunately the supply of most of them is exhausted. I have not more than four or five to send you. You will, however, find a general and complete summary of my theory on seiches in Volume II of my monograph: Le Leman, pages 39–213.[1] I can but believe that this work will be found in some one of the libraries in your city, and that you can have access to it.

CORRECTION.

Dr. N. E. Dorsey requests that the words "of the atoms or corpuscles," unfortunately inserted by the Editor, and overlooked in correcting the proof, (September REVIEW, page 383, column 2, line 14) be struck out. "On the elastic solid theory of light the luminiferous ether is treated as a *continuous* medium; not as one composed of discrete particles as the words atoms or corpuscles imply."

WEATHER BUREAU MEN AS INSTRUCTORS IN METEOROLOGY.

Since preparing the article on this subject published in the MONTHLY WEATHER REVIEW for August we have received several additional letters, from which we make the following extracts:

Mr. B. S. Pague, Local Forecast Official, says:

I engaged in the work of public lectures in the autumn of 1889, when my first address was at a Farmers' Institute held in Oregon City, Clacka-

[1] F. A. Forel. Le Léman. Monographie Limnologique. T. I., 1892; II, 1895, and Tome III in preparation. Lausanne, Librairie Rouger.